Bibliometric Analysis of Scholarly Output on Cardiovascular Disease-Related Research in Qatar: A Preliminary Analysis

Ola Elakel1, Suad Huseen1, Mohamed Izham1, Ahmed Awaisu1*

1College of Pharmacy, QU Health, Qatar university, Doha, Qatar
*Corresponding author: aawaisu@qu.edu.qa

Background

- Cardiovascular diseases (CVDs) are the leading cause of death from noncommunicable diseases in Qatar
- Qatar National Research Funds (QNRF), Qatar University (QU), and other institutions have identified CVD-related research as a priority research area
- Qatar allocates a huge amount of funding and investment for CVD-related research
- No enough data in the literature about CVD research activity and productivity in Qatar

Study Objective

- The objective of this study was to evaluate the quantity and quality of CVD-related research in Qatar over the last 20 years.

Methods

Table 1

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<tr>
<th>Study Design</th>
<th>Bibliometric analysis</th>
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<td>Databases</td>
<td>Scopus, Web of Science, PubMed, Cochrane Library</td>
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<td>Inclusion Criteria</td>
<td>CVD-related papers published in online journals</td>
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<td>Data extracted</td>
<td>Publication-related parameters, Journal metrics</td>
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<td>Data analysis</td>
<td>Microsoft Excel, SPSS version 26</td>
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Interim Results

- 20 years (2000-2020): 1385 CVD-related publications identified
- 3 years (2018-2020): 534 CVD-related publications identified
- 85% of the publications were applied research, while 15% were basic research publications
- 83% of publications were indexed in Scopus, while 90% of publications were indexed in Web of Science

Publications Related Parameters

Number of publications per year (Figure 1)

- There is a noticeable upward trend over the 3 years with an increase of more than 40% from 2018 to 2020
- Average of 178 publications/year

Types of publication (Figure 2)

- 4 types identified: Original research articles, reviews, editorials, and letters
- The majority were original articles, followed by review articles

CVD types (Figure 3)

- “CVDs in general” were the most common covered topic. It included disease burden, epidemiology, treatment approaches, and animal models.
- This was followed by stroke, arrhythmia, coronary artery disease, and thrombosis, respectively.

Main funding institutions in Qatar (Figure 4)

- 201 documents were funded
- 41.79% were funded by Qatari funding institutions.
- QNRF was the main funding institution
- 44.5% had the main author from a Qatari affiliation, mainly Hamad Medical Corporation

Journal Related Parameters

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<th>Journal metrics (Table 2)</th>
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<td>Metrics</td>
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<tr>
<td>Impact</td>
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<td>Factor</td>
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<td>SJR</td>
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<td>Citations</td>
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Journal’s quartiles (Figure 5)

- 48% of the publications were published in the top 25% journals (Q1)
- 29.5% in Q2
- 4.8% of the publications were published in Q4

Limitations

- Due to the limited time and large number of publications, only 3-year results were analyzed
- Although 4 databases were searched, some literature may have been missed such as grey literature

Conclusion

- This study is an initial indicator that CVDs-related research in Qatar is of high quality
- This study will serve as a tool for funding institutions in the country for a better allocation of grants and funding
- Upon the completion of the study, we will be able to visualize more clearly and make a conclusion about CVD-related research in Qatar

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References: